METHOD AND SCALABLE ARCHITECTURE FOR PARALLEL CALCULATION OF THE DCT OF BLOCKS OF PIXELS OF DIFFERENT SIZES AND COMPRESSION THROUGH FRACTAL CODING

Abstract of the Disclosure

A method of calculating the discrete cosine transform (DCT) of blocks of pixels of a picture includes the steps of defining first subdivision blocks called *range*

5 blocks, having a fractional and scaleable size $N/2^i * N/2^i$, where *i* is an integer number, with respect to a maximum pre-defined size of $N*N$ pixels of blocks of division of the picture, referred to as *domain* blocks, shiftable by

10 intervals of $N/2^i$ pixels. The method also includes the step of calculating the DCT on 2^i *range* blocks of a subdivision of a *domain* block of $N*N$ pixels of the picture, in parallel.